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Labor and Expense of Harvesting and Feeding is Saved

DOES IT PAY TO HOG OFF CORN?

By P. S. RICHEY

Division of Animal Husbandry

DOES IT PAY TO HOG OFF CORN?

Hogging off corn is followed with profit by many of Indiana's best hog men. Practical co-operative farm demonstrations in many counties of the state have proven that more pork can be produced per acre of corn when fed in this way than in any other. Gains are more rapid and economical than when hogs are fed by hand, and the labor of harvesting and feeding the corn is saved. This is a big item, especially now when labor is so scarce, costly and difficult to secure.

Farmers who have practiced this method of harvesting a part of their corn are agreed that hogging off should be followed on every well managed corn and hog farm.

Plant a Field of Early Corn for Hogging Off

Make this a part of the rotation. Corn and corn by-products are costly during August and September. A field of early corn large enough to feed the fattening hogs during this period will give more time for other fall work. Plant quick maturing, locally grown varieties for early use. Any variety which matures in the ordinary season is satisfactory for later use.

When Should Hogs be Turned Into Corn?

Hogs may be turned into corn any time after it has passed the dough stage and is beginning to dent and harden. Immature corn is likely to cause the hogs to scour badly. Too sudden a change to a full feed of new corn will result the same way. Success and profit in hogging off corn depends as much upon accustoming the hogs to new corn gradually as upon any other management factor. A good way to do this is to throw a few stalks of corn to the hogs as soon as it reaches the advanced milk stage, gradually increasing the amount until in ten or twelve days when the corn is well dented the hogs are getting a full feed. Even then they must be watched closely every day to see that none of them get off feed because of digestive trouble.

How Many Hogs are Required per Acre?

The number of hogs required per acre depends largely upon their size and the yield of the corn. Enough hogs ought to be fed to clean the area up in ten to fifteen days. This means that 20 to 30 shoats weighing 125 pounds each are required per acre of 40 to 50 bushel corn.

Number of 125 Pound Hogs Required per Acre

Yield of corn	15 days	20 days	25 days	30 days
30 bu. per acre	18 hogs	13 hogs	10 hogs	9 hogs
40 " " "	24 hogs	18 hogs	14 hogs	12 hogs
50 " " "	30 hogs	23 hogs	18 hogs	15 hogs
60 " " "	36 hogs	28 hogs	22 hogs	18 hogs
70 " " "	42 hogs	33 hogs	26 hogs	21 hogs

As the season advances the area hogged off at one time may well be decreased, to insure against the loss of corn from bad weather.

A cheap convenient method of fencing a portion of a field for hogging off is to stretch up 26 to 32-inch woven wire fence. Only anchor posts are needed—temporarily placed. Often posts of the permanent fences on opposite sides of a field can be used. Then the temporary fence is tied to the corn stalks at frequent intervals. Such a make-shift will turn the hogs as long as there is corn enough to feed on.

Most farmers prefer shoats that weigh around 90 pounds. Lighter or heavier ones may be used profitably. When shoats weighing 50 to 75 pounds are used it is a good practice to add a few older hogs to help break down the corn. With a large number of hogs, especially heavy rather fat ones, it is a good practice to break down the corn with a long heavy pole, breaking enough at one time to last two or three days.

Shoats in rather thin condition are more profitable feeders for hogging off than fatter ones. They glean the corn with less waste and gain more rapidly. Some of the best hog men divide their hogs into two lots—one thin and the other fatter. The fatter and larger hogs are turned into the corn first, the thinner, lighter bunch following them later to clean up the area. In this way there is less corn wasted and the fatter hogs do not have to exercise so much to get enough corn. Hence they gain more rapidly, and economically too, for the corn they leave is gleaned by the lighter, thinner shoats.

Table I. Comparing Gains Made and Feeds Consumed by Hogs of Different Sizes When Hogging Off Corn with Supplements

Ave. Initial wt. per head	Ave. final wt. per head	Daily gain Ave. lbs.	Corn per pound gain	Per acre pounds gain
60 to 75	160 to 175	1.75	4.74	676
75 to 90	175 to 200	1.87	4.91	631
90 to 110	190 to 210	1.96	5.02	593
110 to 130	210 to 230	2.11	5.34	521

A Supplementary Feed Should be Fed

The use of a supplementary protein feed like soybeans increases the rate of gain and the total gain per acre and reduces the cost of production according to farm demonstration results. The

following table presents the results from two co-operative feeding demonstrations, where the hogs in one lot were used to harvest corn alone and the hogs in the other lot corn and soybeans.

Table II. Comparison of Corn Alone and Corn and Soybeans for Hogging Off

	Corn Alone	Corn and Soybeans
Number of hogs	122	272
Number of acres hogged off	15.7	14.3
Number of hogs per acre	7.7	18.9
Number of days to consume crop	43.6	26.6
Size of hogs at beginning	100.3 lbs.	113.5 lbs.
Ave. daily gain per hog	1.36 lbs.	1.37 lbs.
Gain per acre	462 lbs.	641 lbs.
Gain per bu. corn consumed	8.9 lbs.	11.9 lbs.
Corn consumed per pound gain	5.7 lbs.	4.7 lbs.

While the average daily gain per head was about equal in each case, an acre of corn and soybeans produced 641 pounds of pork compared with 462 pounds for corn alone. The gain per bushel of corn consumed was three pounds more with the supplement—11.9 pounds for the corn and soybeans and only 8.9 pounds for the corn alone. The hogs getting only corn consumed 5.7 pounds of corn per pound gain in live weight compared with 4.7 pounds when soybeans were grazed with the corn.

A Home-Grown Supplement is Recommended

The table below presents the results of two co-operative hogging off demonstrations conducted in Vermilion County. In one case tankage was supplied as a supplement and in the other soybeans were grown in the corn.

Table III. Comparison of Corn and Tankage with Corn and Soybeans

	Corn Tankage	Corn and Soybeans
Number of hogs	548	105
Ave. initial weight per head	101.13 lbs.	93.23 lbs.
Ave. final weight per head	147.41 lbs.	165.04 lbs.
Number of days fed	35	66
Ave. gain per head	44.97 lbs.	72.76 lbs.
Ave. daily gain	1.27 lbs.	1.27 lbs.
Ave. yield per acre (estimated)	40 bu.	40 bu.
Gain per bu. corn consumed	15.2 lbs.	15.88 lbs.
Corn consumed per pound gain	3.61 lbs.	3.53 lbs.
Pounds gain per acre	608.2 lbs.	635.2 lbs.
Value of pork per acre at \$15.00		
per cwt.	\$91.23	\$95.28

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While the average daily gain, the gain per bushel of corn eaten and the total number of pounds gained per acre of corn varied little, there was a slight difference in favor of the soybeans. While the difference is not outstanding, these demonstrations do prove that soybeans can be profitably grown as a supplementary intercrop in corn that is to be hogged off. Growing the two crops also gives greater insurance against total crop failure, and the soybeans help to maintain the soil fertility by gathering nitrogen from the air.

If soybeans are not grown in the corn, and no other home grown protein crop is available for grazing, it may be profitable to feed tannage or linseed oilmeal in a self-feeder. This is especially advisable with light, thin shoats weighing 75 to 100 pounds. It is doubtful whether feeding tannage or linseed meal will be profitable after the hogs average 150 to 175 pounds.

When Soybeans are Grown in Corn

**Which Variety of Soybeans?*—An effort should be made to select a variety of soybeans which will be ready for hogging off at the time the corn is denting and ready for the hogs. The best yielding varieties require less time for maturing than does the average variety of corn. Early varieties are adapted to all sections of Indiana but the Early Brown and Ito San varieties usually mature before the corn is ready to hog off. This is less objectionable, however, than to plant a later maturing variety which produces less, or which is so late in maturing that the beans are caught by an early frost.

The Hollybrook is a variety that matures about right for planting with corn but it is not adapted to climatic conditions of the Northern third of Indiana. Neither should southern grown seed be taken north. The time required for the Hollybrook to mature is about the same as of Reid's Yellow Dent corn.

Plant Soybeans in Rows with the Corn on the same day the corn is planted. Beans require only a shallow covering. They may be planted in the corn rows by using a corn planter having a bean attachment, dropping both corn and beans at the same time. Or they may be drilled with the corn planter immediately after the corn is planted by following the first wheel tracks. Since soybeans are not planted as deeply as the corn, it will not be disturbed by the planter runners.

Should Soybean Seed be Inoculated?—Yes, where they are to be grown on soil that has never grown a soybean crop. Most failures to secure a good bean yield occur because the soil has not been inoculated with the proper bacteria. The use of soil on which soybeans were grown successfully the previous year is a good practice, especially when taken from around the roots of old bean plants. Mix one gallon of such soil with every bushel of soybean seed just before putting it into the planter. Station Bulletin No. 172 gives a complete discussion of soybean culture.

* The information on soybeans is furnished by the Soils and Crops Division.

Thrifty Hogs Make Most Economical Gains

Should a Conditioner be Used?—Plenty of salt and good wood ashes are recommended. Many farmers use a home conditioner consisting of three parts common salt, three parts copperas, three parts Glauber's Salts, one part sulphur and five parts wood ashes.

Some Form of Shelter should be furnished hogs hogging off corn. Temporary sheds covered with corn fodder or straw are comparatively cheap but furnish much needed protection.

Fresh Water at All Times and Near at Hand is a slogan which goes with profitable hog production and is especially important when hogs are harvesting corn.

Frosted Corn

Frosted or Soft Corn may be handled profitably by allowing hogs to do the harvesting. They make greater gains on it than any other class of live stock. Satisfactory returns were received for soft corn in this way by many Indiana farmers, during the fall of 1917, when an unusually large portion of the state's corn crop was frosted.

Handling Hogs Upon Removal from the Corn Field

Hogs that have been fed in standing corn have become accustomed to a full feed. It is never advisable to limit the ration after they are removed. They should be continued on a heavy ration similar to the one to which they have become accustomed until marketed.

What Are the Advantages of Hogging Off Corn?

Labor and expense of harvesting and feeding corn is saved.

Crib space is saved.

The corn stalks are in better condition for next year's crop.

The corn crop is fed in the field where grown, thus returning a large portion of the plant food to the soil.

Why Feed Protein Supplements?

More pork is produced from an acre of corn.

More rapid and economical gains are made.

Variety adds to thrift and stimulates appetite, increasing gains.

Why Grow Soybeans in Corn?

A home grown supplement is supplied at less cost.

Two crops may be cultivated as one.

Greater insurance against total crop failure.

Soil fertility may be maintained more easily.

The acre profit is greater than when corn alone is hogged off.

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